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Systems Applications Office
4-2-66

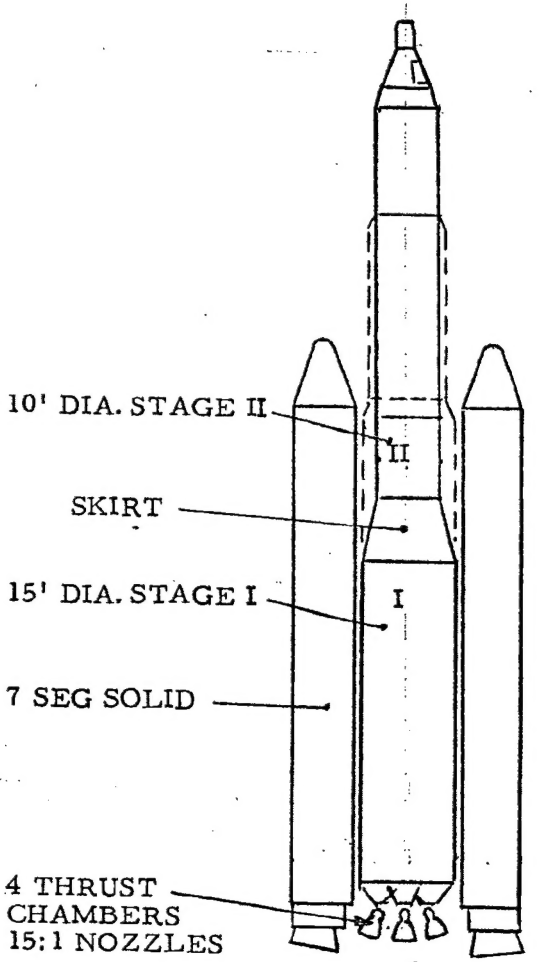
WHS-CC5

11

MOL

LARGE CORE TITAN III

- PAYLOADS (i = 80°; 80/130 ORBIT)
  - .. LDC 1/7 SEG. --44,000 LBS.
  - .. LDC 1 & 2/7 SEG. --50,000 LBS.
- TIIIC (U) DEVELOPMENT PROVIDES
  - .. 15:1 NOZZLES
  - .. 7 SEGMENT SOLIDS
- LDC 1 CHANGES
  - .. STRUCTURES
  - .. PROPULSION SYSTEM
  - .. CONTROL SYSTEM



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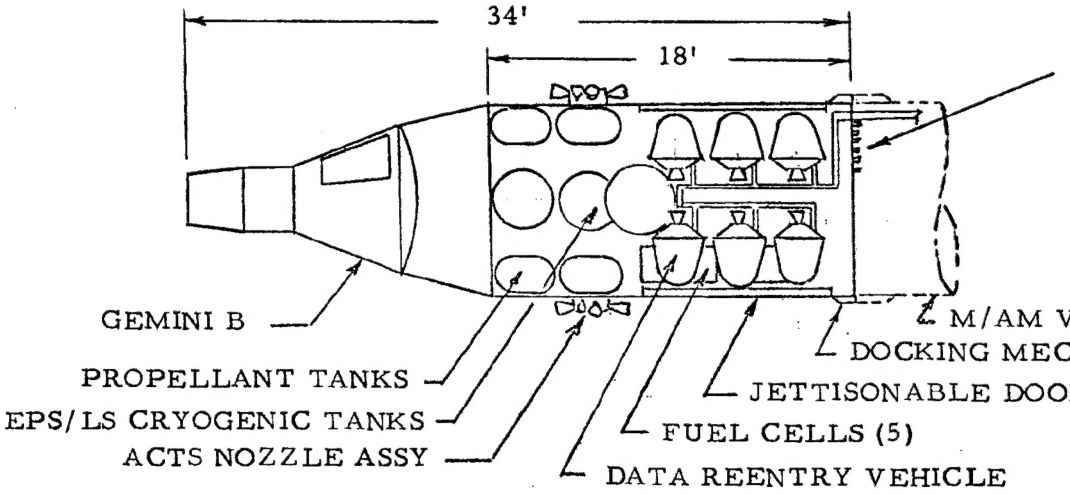
RESUPPLY VEHICLE DESCRIPTION

(TYPICAL 60 DAY DESIGN)



EST. WT. = 28.4K

FUNCTIONS-DOCKED

RESUPPLY VEHICLE

- ATTITUDE CONTROL (ACTS PROPULSION)
- PRIME POWER SYSTEM
- LIFE SUPPORT EXPENDABLES
- DATA SYSTEM

M/AM VEHICLE

- LIFE SUPPORT SYSTEM
- ATTITUDE CONTROL ELECTRONICS
- COMMUNICATIONS & DATA HANDLING
- ENVIRONMENTAL CONTROL

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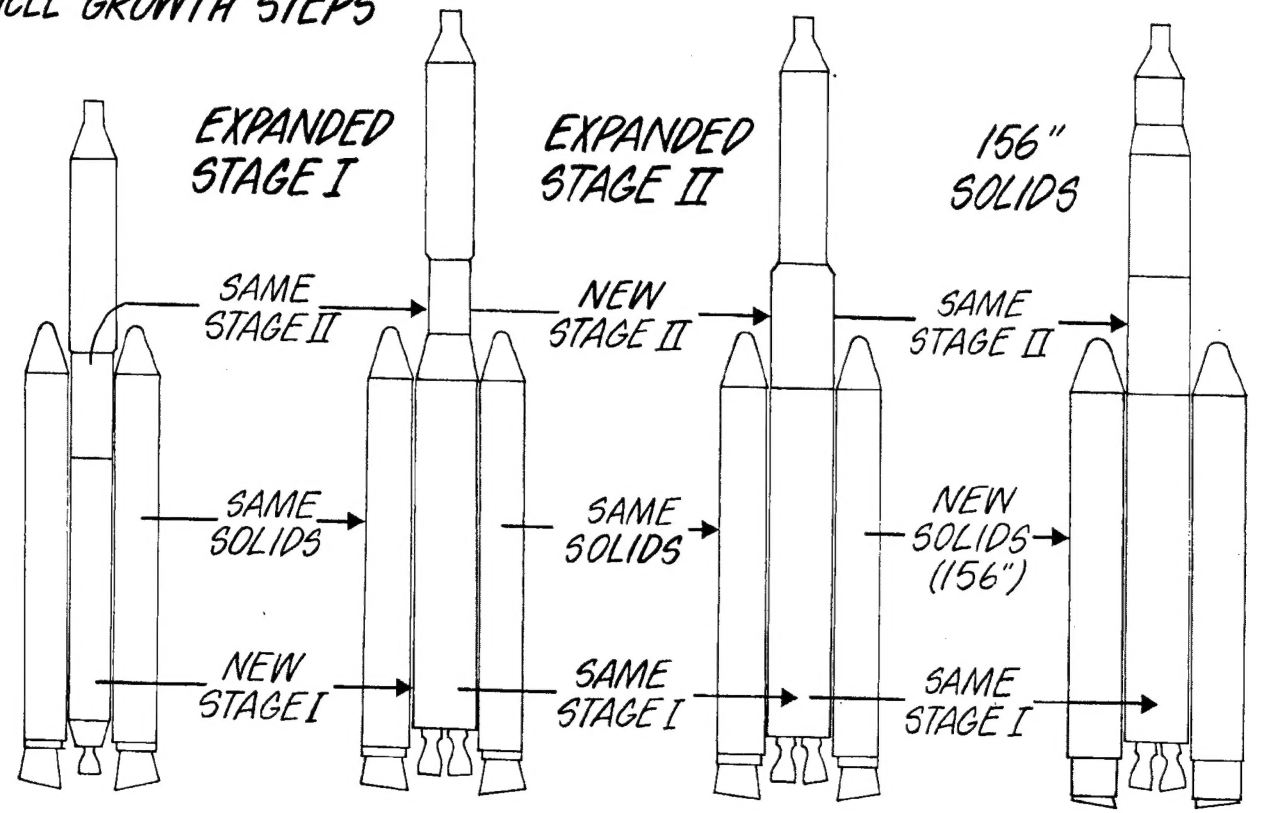
AD 66 XXXX 00140 R11
MAR 21 1966

MOL PERFORMANCE IMPROVEMENT PLAN

● LAUNCH VEHICLE GROWTH STEPS



P/L (80° 80/130) 32,000 | 42① - 44,000 | 45 - 50,000 | 62① - 68,000

① NO EXTENDED STAGE I OR STAGE II BURN DURATION

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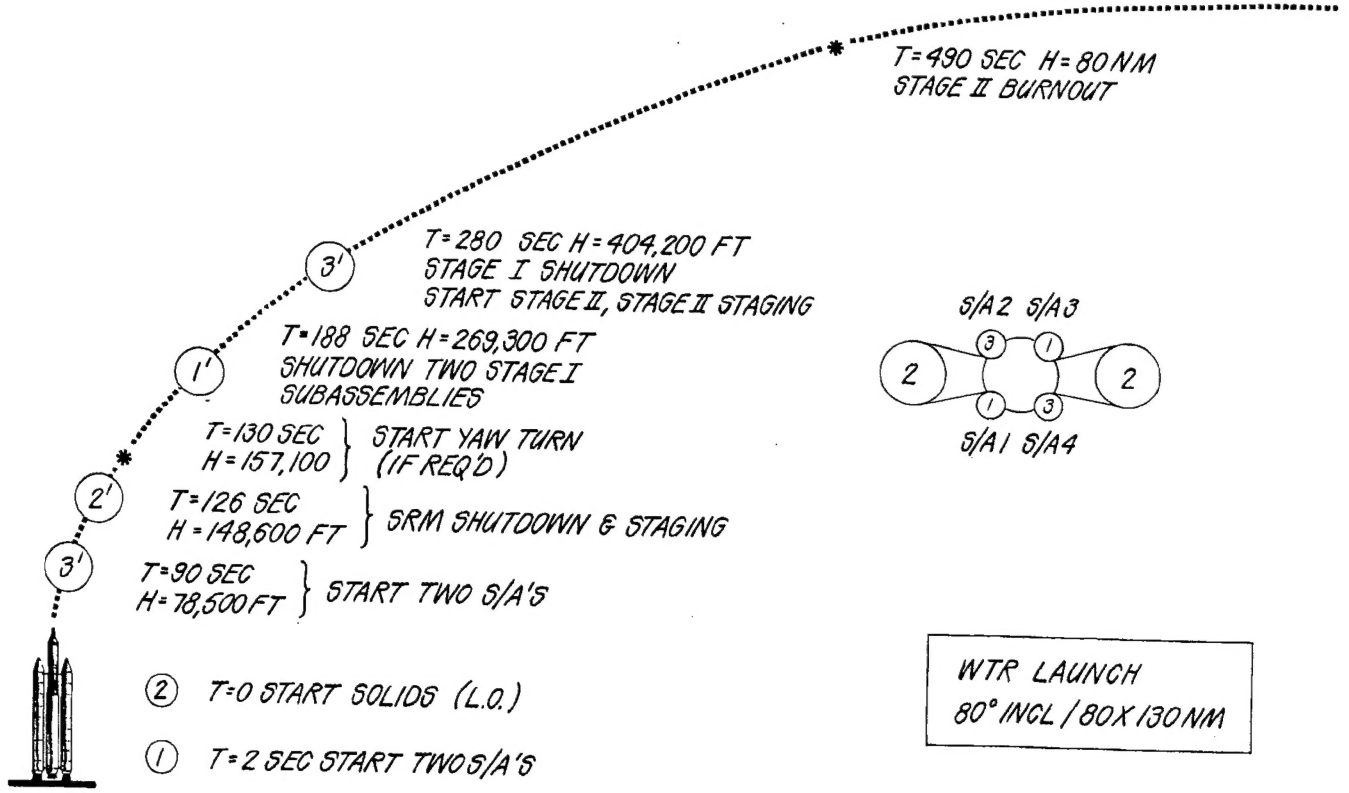
AD 66 XXXX 00163
MAR251966

MOL PERFORMANCE IMPROVEMENT PLAN

● SEQUENCE OF EVENTS - STEP I CONFIGURATION (80°- 80/130 NM)



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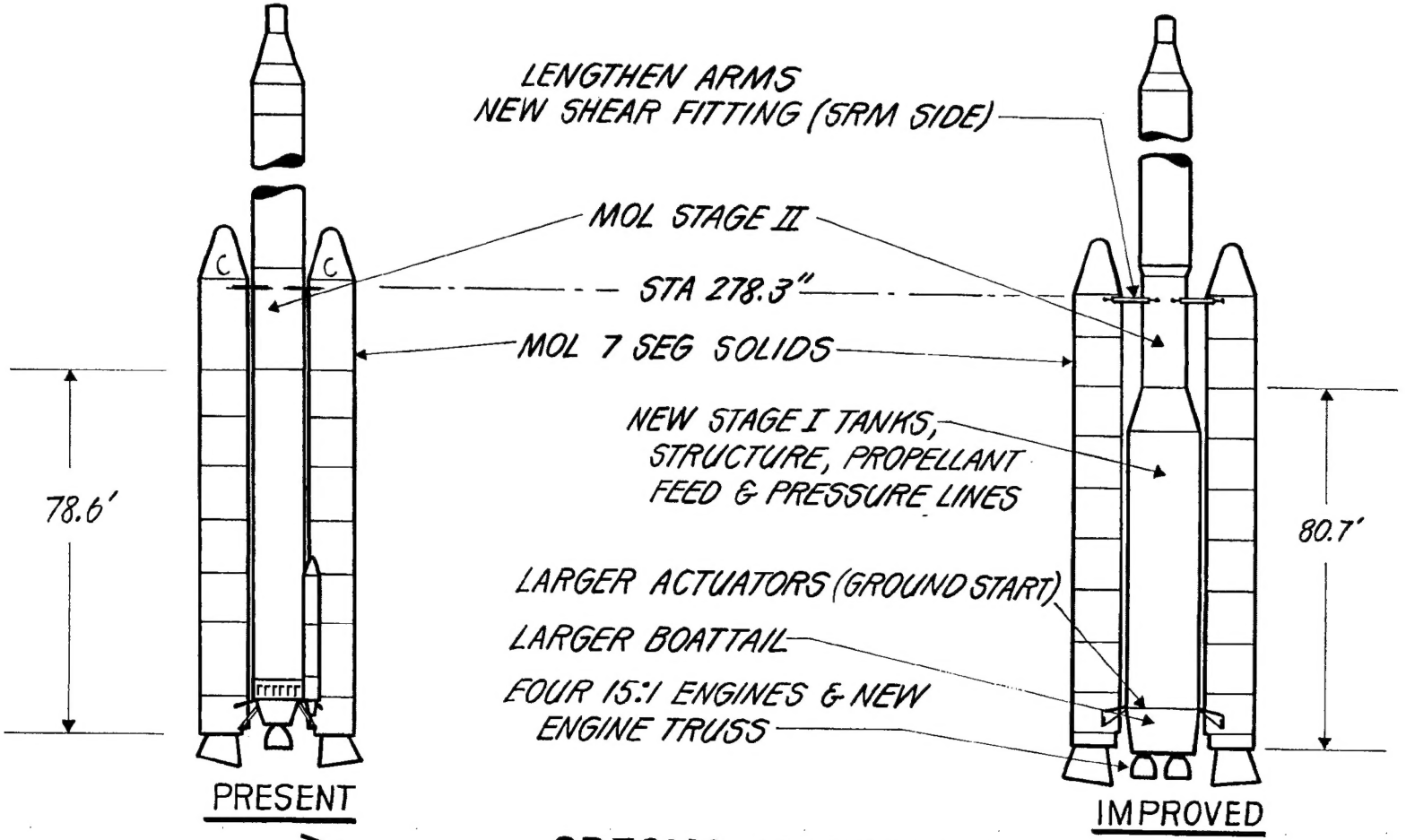
AD 66 XXXX 00161
MAR 251966

MOL PERFORMANCE IMPROVEMENT PLAN

● VEHICLE CONFIGURATION



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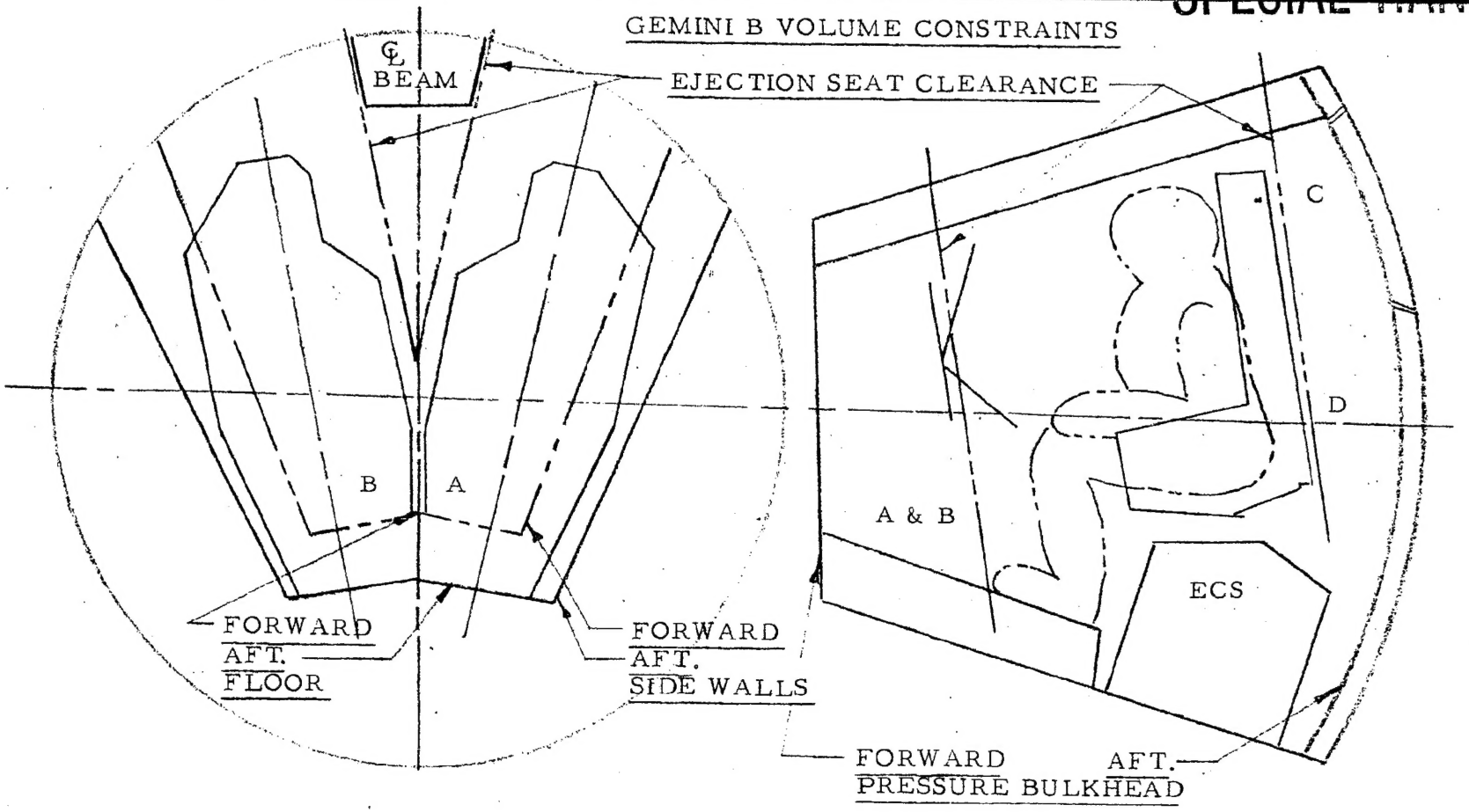
GEMINI B DATA RETURN CAPABILITY

~~SECRET~~

~~SPECIAL HANDLING~~

GEMINI B VOLUME CONSTRAINTS



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GEMINI B DATA RETURN CAPABILITY

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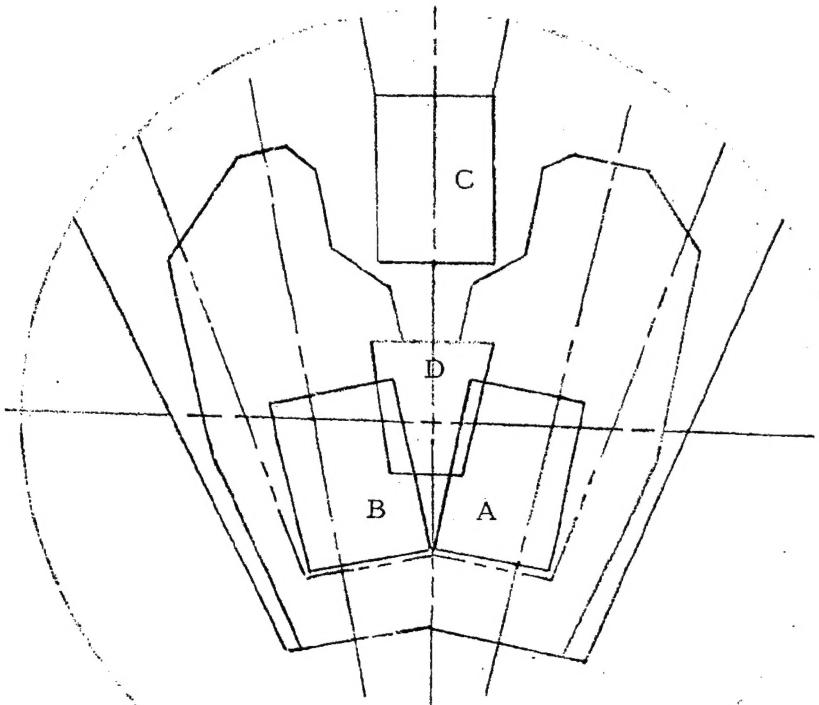

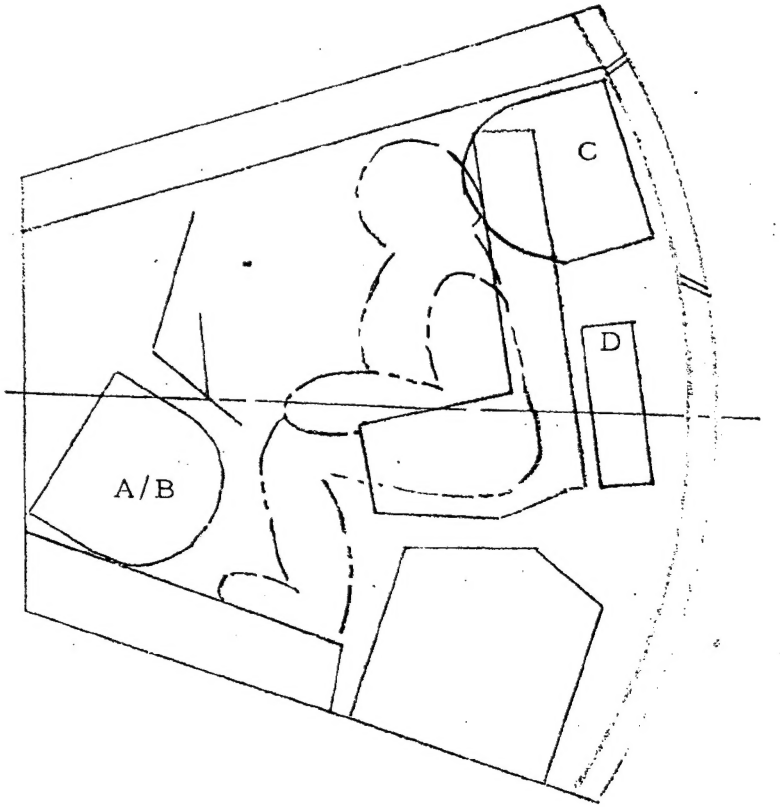

- THREE PRIMARY DATA PACKAGES
- SECONDARY DATA BEHIND SEAT

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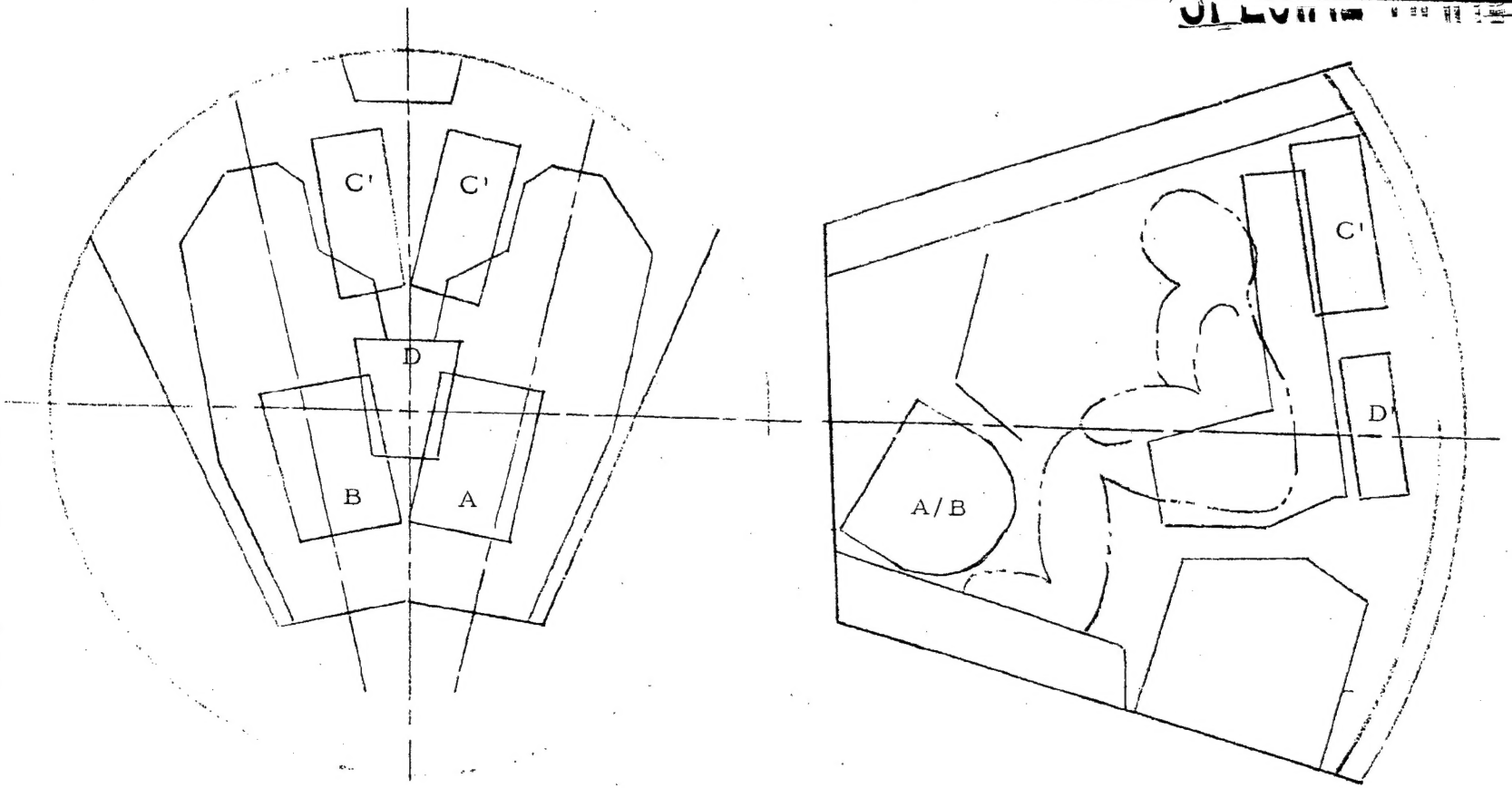
GEMINI B DATA RETURN CAPABILITY

SECRET



- FOUR PACKAGES OF PRIMARY DATA
  - / TWO PRIMARY SHAPES
  - / TWO ALTERNATE SHAPES
- SECONDARY DATA BEHIND SEAT

SECRET SPECIAL HANDLING

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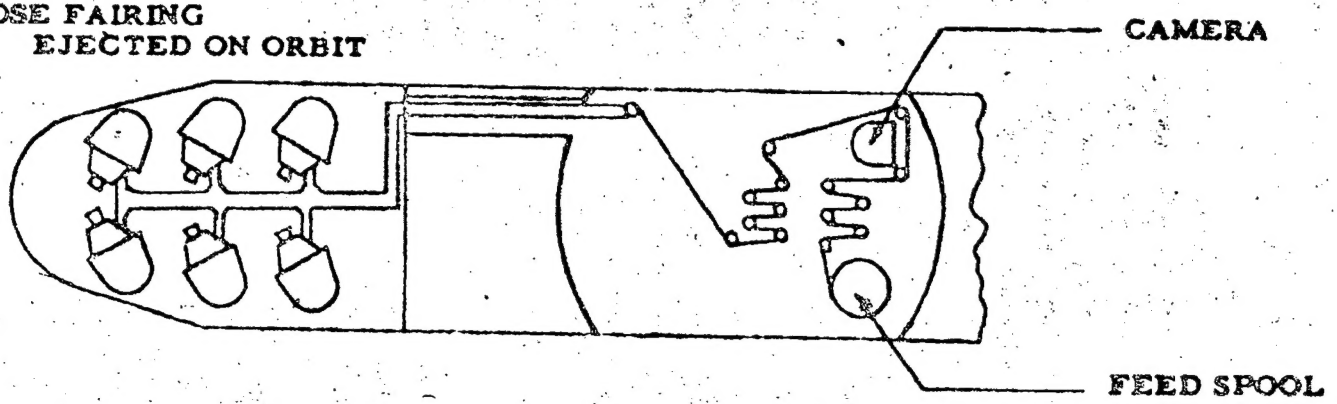
FILM HANDLING AND RECOVERY APPROACH



REQUIREMENTS

24,000 FEET OF 9" FILM

6 RV's 33" DIAMETER (MODIFIED MARK 5) - 70 LBS FILM

STATUS

MECHANICAL ASPECTS OF FILM TRANSPORT SIMILAR TO PREVIOUS DESIGNS

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